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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/228,658	01/12/1999	HANS PRINZING	P17233	8270

7590 08/08/2003

GREENBLUM & BERNSTEIN
1941 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

WALLS, DIONNE A

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 08/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/228,658	Applicant(s) PRINZING ET AL.	
	Examiner Dionne A. Walls	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-19 and 22-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-19 and 22-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on April 28th, 2003 has been entered.

Claim Objections

2. Claims 1 and 33 are objected to because of the following informalities:

- It appears as if Applicant typed, in the amended recitation of these claims, an extra "at least one of". Examiner believes that the Amended language should recite "...arranged to adjust the pressure differential as at least one of a function of [at least one of] a line force in the roll nip...". This interpretation/rewording is consistent with the disclosure/language in the instant specification. Appropriate correction is requested.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 4-19 and 33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of Bentele et al (US. Pat. No. 5,788,817) in view of EP 752,495.

Bentele et al claims a roll press for the treatment of a web of material which includes: a first press roll (corresponding to the claimed "shoe press unit") with a first support element having a concave support surface for defining a wide press nip (corresponding to the claimed "press nip"), including a very flexible shell (corresponding to the claimed "flexible press belt/jacket") and a fixed support (corresponding to the claimed "non-rotating carrier") around which the first shell rotates; a backing roll (corresponding to the claimed "counter roll") with a second support element having a respective second rotatable roll shell (corresponding to the claimed "roll jacket") including a second fixed support (corresponding to the claimed "second non-rotating carrier") around which the second roll shell is rotatable, and being mounted at its ends in non-displaceable manner (corresponding to the claimed "deflection compensation roll"); a third roll; and a roll nip formed between the backing roll and the third roll. The backing roll is axially increasingly bent in its axially central region toward the third roll (corresponding to the claimed "counter roll....being cambered"). The roll press assembly has a second support element which is oriented so that the direction of action

(corresponding to the claimed "action plane") is slightly inclined by an angle which is between 2 and 15 degrees and/or between 4 and 8 degrees. The direction of action of the second support element begins at a position that is axial center of the second roll (corresponding to the claimed "second support element of the counter roll coinciding with ...the at least one first support element").

While Bentele et al may not claim a common pressure fluid line arranged to generate internal pressures by the first and second support elements; an adjustment device/variably adjustable valve/control device arranged to change a pressure differential between said internal pressures generated; first and second support elements being pressure fluid-actuated, said elements being connected to a common pressure fluid line; and pressure-active surfaces of one support element being "not equal" to second pressure active surfaces of the first support element of the shoe press unit, EP 752,495 discloses a shoe press device for treating a paper web having a shoe press roll comprising support elements, which press against a sag adjustment roll also having support elements which are smaller in their pressure areas than the support elements of the shoe press (corresponding to the claimed "pressure-active surfaces...being not-equal"). Both the shoe press and sag adjustment roll support elements are fed with pressurized hydraulic liquid (corresponding to the claimed "fluid actuated") from a common pressure agent source. Various control devices (corresponding to the claimed "pressure reduction device/ variably adjustable valve/control device") can be provided such that different respective pressures may be applied to the support elements of both shoe press roll and sag adjustment roll

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according to the requirements for dewatering a particular web (see col. 4, lines 9-15; col. 5, lines 1-10; see abstract and figs. 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the claimed invention of Bentele et al by adding the fluid-actuated support elements, pressure adjustment/control means, and first and second support elements of different area/number of EP 752,495 in order to control the pressure to the first and second roll support elements which would advantageously allow for a variation of the distribution of the pressing force, as desired, over the width of the paper web as taught in EP 752,495 (col. 1, lines 38-45) . Further, while Bentele modified by EP 752,495 may not specifically state that the control devices – which correspond to the claimed “adjustment device” - are structured to adjust the pressure differential as a function of either a line force in the roll nip by predeterminable characteristic curves or line force correction procedures for the roll nip, wherein said correction procedures are input by electronic means and produced by corresponding signals of a process guidance system, absent any indication to the contrary, the control devices of Bentele modified by EP 752,495 would be structurally capable of performing the intended pressure changes as a function of either concept, as these procedures for adjusting pressure is conventional in the art (as is even admitted by Applicant in the instant specification).

Lastly, regarding claims 5-12, 18-19, and 22-23, these claims are comprised wholly of language that imparts *method*, rather than *structural*, limitations to the claims. Applicant is reminded that claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function; and that “apparatus claims cover

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what a device *is*, not what a device *does*". (See MPEP 2114.) Therefore, only the recitation in the above claims which impart structural limitations have been examined over the prior art.

3. Claim 25 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of Bentele et al (U.S. Patent No. 5,788,817) in view of EP 752, 495, further in view of Smook (*Handbook for Pulp & Paper Technologists, 2nd Ed.*).

This claim differs from the claims of Bentele et al modified by EP 752,495 because of language that recites third and fourth rolls (in addition to the counter roll) being cambered. However, as disclosed in Smook, cambering of all press rolls involved in papermachine pressing operations would have been obvious to one of ordinary skill in the art because cambering, or "crowning" of press rolls, is a necessary and conventional practice in the papermaking art that is performed in order to achieve a uniform pressure profile across the contacting face of the press roll (page 253, 2nd paragraph).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-19, and 33 are rejected under 35 U.S.C. 103(a) as being obvious over Bentele et al (US. Pat. No. 5,788,817) in view of EP 752,495.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Bentele et al discloses a roll press for the treatment of a web of material which includes: a first press roll (corresponding to the claimed "shoe press unit") with a first support element having a concave support surface for defining a wide press nip (corresponding to the claimed "press nip"), including a very flexible shell (corresponding

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to the claimed "flexible press belt/jacket") and a fixed support (corresponding to the claimed "non-rotating carrier") around which the first shell rotates; a backing roll (corresponding to the claimed "counter roll") with a second support element having a respective second rotatable roll shell (corresponding to the claimed "roll jacket") including a second fixed support (corresponding to the claimed "second non-rotating carrier") around which the second roll shell is rotatable, and being mounted at its ends in non-displaceable manner (corresponding to the claimed "deflection compensation roll"); a third roll; and a roll nip formed between the backing roll and the third roll. The backing roll is axially increasingly bent in its axially central region toward the third roll (corresponding to the claimed "counter roll....being cambered"). The roll press assembly has a second support element which is oriented so that the direction of action (corresponding to the claimed "action plane") is slightly inclined by an angle which is between 2 and 15 degrees and/or between 4 and 8 degrees. The direction of action of the second support element begins at a position that is axial center of the second roll (corresponding to the claimed "second support element of the counter roll coinciding with ...the at least one first support element") (see col. 3, line 34- col. 5, lin 54; see abstract and figs).

While Bentele et al may not disclose a common pressure fluid line arranged to generate internal pressures by the first and second support elements; an adjustment device/variably adjustable valve/control device arranged to change a pressure differential between said internal pressures generated; first and second support elements being pressure fluid-actuated, said elements being connected to a common

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pressure fluid line; and pressure-active surfaces of one support element being "not equal" to second pressure active surfaces of the first support element of the shoe press unit, EP 752,495 discloses a shoe press device for treating a paper web having a shoe press roll comprising support elements, which press against a sag adjustment roll also having support elements which are smaller in their pressure areas than the support elements of the shoe press (corresponding to the claimed "pressure-active surfaces...being not-equal"). Both the shoe press and sag adjustment roll support elements are fed with pressurized hydraulic liquid (corresponding to the claimed "fluid actuated") from a common pressure agent source. Various control devices (corresponding to the claimed "pressure reduction device/ variably adjustable valve/control device") can be provided such that different respective pressures may be applied to the support elements of both shoe press roll and sag adjustment roll according to the requirements for dewatering a particular web (see col. 4, lines 9-15; col. 5, lines 1-10; see abstract and figs. 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the claimed invention of Bentele et al by adding the fluid-actuated support elements, pressure adjustment/control means, and first and second support elements of different area/number of EP 752,495 in order to control the pressure to the first and second roll support elements which would advantageously allow for a variation of the distribution of the pressing force, as desired, over the width of the paper web as taught in EP 752,495 (col. 1, lines 38-45) . Further, while Bentele modified by EP 752,495 may not specifically state that the control devices – which correspond to the claimed "adjustment

device" - are structured to adjust the pressure differential as a function of either a line force in the roll nip by predeterminable characteristic curves or line force correction procedures for the roll nip, wherein said correction procedures are input by electronic means and produced by corresponding signals of a process guidance system, absent any indication to the contrary, the control devices of Bentele et al modified by EP 752,495 would be structurally capable of performing the intended pressure changes as a function of either concept, as these procedures for adjusting pressure are conventional in the art (as is even admitted by Applicant in the instant specification).

Lastly, regarding claims 5-12, 18-19, and 22-23, these claims are comprised wholly of language that imparts *method*, rather than *structural*, limitations to the claims. Applicant is reminded that claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function; and that "apparatus claims cover what a device *is*, not what a device *does*". (See MPEP 2114.) Therefore, only the recitation in the above claims which impart structural limitations have been examined over the prior art.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bentele et al (U.S. Patent No. 5,788,817) in view of EP 752, 495, further in view of Smook (*Handbook for Pulp & Paper Technologists, 2nd Ed.*).

This claim differs from the claims of Bentele et al modified by EP 752,495 because of language that recites third and fourth rolls (in addition to the counter roll) being cambered. However, as disclosed in Smook, cambering of all press rolls involved in papermachine pressing operations would have been obvious to one of ordinary skill

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in the art because cambering, or "crowning" of press rolls, is a necessary and conventional practice in the papermaking art that is performed in order to achieve a uniform pressure profile across the contacting face of the press roll (page 253, 2nd paragraph).

7. Claims 1, 4-19, 22-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 195 20 443 in view of EP 752,495.

DE 195 20 443 discloses a roll press for the treatment of a web of material which includes: a first press roll (corresponding to the claimed "shoe press unit") with a first support element having a concave support surface for defining a wide press nip (corresponding to the claimed "press nip"), including a very flexible shell (corresponding to the claimed "flexible press belt/jacket") and a fixed support (corresponding to the claimed "non-rotating carrier") around which the first shell rotates; a backing roll (corresponding to the claimed "counter roll") with a second support element having a respective second rotatable roll shell (corresponding to the claimed "roll jacket") including a second fixed support (corresponding to the claimed "second non-rotating carrier") around which the second roll shell is rotatable, and being mounted at its ends in non-displaceable manner (corresponding to the claimed "deflection compensation roll"); a third roll; and a roll nip formed between the backing roll and the third roll. The backing roll is axially increasingly bent in its axially central region toward the third roll (corresponding to the claimed "counter roll....being cambered"). The roll press assembly has a second support element which is oriented so that the direction of action (corresponding to the claimed "action plane") is slightly inclined by an angle which is

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between 2 and 15 degrees and/or between 4 and 8 degrees. The direction of action of the second support element begins at a position that is axial center of the second roll (corresponding to the claimed "second support element of the counter roll coinciding with ...the at least one first support element") (cols. 1,2 and 3; see fig. 1).

While DE 195 20 443 may not disclose an adjustment device/variably adjustable valve/control device arranged to change a pressure differential between said internal pressures generated; and pressure-active surfaces of one support element being "not equal" to second pressure active surfaces of the first support element of the shoe press unit, EP 752,495 discloses a shoe press device for treating a paper web having a shoe press roll comprising support elements, which press against a sag adjustment roll also having support elements which are smaller in their pressure areas than the support elements of the shoe press (corresponding to the claimed "pressure-active surfaces...being not-equal"). Both the shoe press and sag adjustment roll support elements are fed with pressurized hydraulic liquid (corresponding to the claimed "fluid actuated") from a common pressure agent source. Various control devices (corresponding to the claimed "pressure reduction device/ variably adjustable valve/control device") can be provided such that different respective pressures may be applied to the support elements of both shoe press roll and sag adjustment roll according to the requirements for dewatering a particular web (see col. 4, lines 9-15; col. 5, lines 1-10; see abstract and figs. 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the claimed invention of DE 195 20 443 by adding the fluid-actuated support elements,

pressure adjustment/control means, and first and second support elements of different area/number of EP 752,495 in order to control the pressure to the first and second roll support elements which would advantageously allow for a variation of the distribution of the pressing force, as desired, over the width of the paper web as taught in EP 752,495 (col. 1, lines 38-45). Further, while DE 195 20 443 modified by EP 752,495 may not specifically state that the control devices – which correspond to the claimed “adjustment device” - are structured to adjust the pressure differential as a function of either a line force in the roll nip by predeterminable characteristic curves or line force correction procedures for the roll nip, wherein these are input by electronic means and produced by corresponding signals of a process guidance system, absent any indication to the contrary, the control devices of Bentele modified by EP 752,495 would be structurally capable of performing the intended pressure changes as a function of either concept, as these procedures for adjusting pressure are conventional in the art (as is even admitted by Applicant in the instant specification).

Lastly, regarding claims 5-12, 18-19, and 22-23, these claims are comprised wholly of language that imparts *method*, rather than *structural*, limitations to the claims. Applicant is reminded that claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function; and that “apparatus claims cover what a device *is*, not what a device *does*”. (See MPEP 2114.) Therefore, only the recitation in claims 1-32 which impart structural limitations have been examined over the prior art.

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8. Claim 25 is rejected under 35 U.S.C. 103(a) as being obvious over DE 195 20 443 in view of EP 752, 495, further in view of Smook (*Handbook for Pulp & Paper Technologists, 2nd Ed.*).

This claim differs from the claims of Bentele et al modified by EP 752,495 because of language that recites third and fourth rolls (in addition to the counter roll) being cambered. However, as disclosed in Smook, cambering of all press rolls involved in papermachine pressing operations would have been obvious to one of ordinary skill in the art because cambering, or "crowning" of press rolls, is a necessary and conventional practice in the papermaking art that is performed in order to achieve a uniform pressure profile across the contacting face of the press roll (page 253, 2nd paragraph).

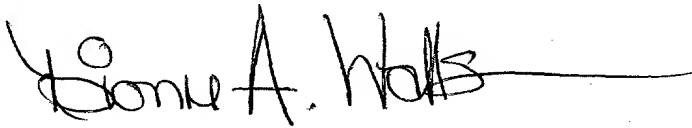
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne A. Walls whose telephone number is (703) 305-0933. The examiner can normally be reached on Mon-Fri, 7AM - 4:30PM (Every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

A handwritten signature in black ink that reads "Dionne A. Walls". The signature is written in a cursive style with a long horizontal line extending to the right.

Dionne A. Walls
August 6, 2003